

Attachment A

Application Serial No. 09/074,200

Att. Unit 2010

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated below. The language being added is underlined ("___") and the language being deleted contains a strikethrough ("") or is enclosed by double brackets ("[[]]").

Paragraph [0005]:

[0005] IP routers are used to take a packet from one network (or link) and place it onto another network (or link). Tables are located within IP routers that contain information or criteria used to determine a best way to route a packet. An example of this information may be the state of network links and programmed distance indications. Unfortunately, IP routers typically route packets by destination IP address, which does not assist in finding a proper route for transportation. There are some exceptions to this routing system[[.]]; however, by using intelligent devices on both sides of a network domain, it is possible to allocate a temporary address to route a packet through a network and restore the original address on the far side of the network when the packet leaves the network. This is the basis for many current virtual private network (VPN) products and is understood in the art.

Paragraphs [0063-0065]:

[0063] Returning to the block diagram of FIG. [[2]]3, a flow quality management engine [[157]]162 is provided within the multi-media router 118. The flow quality management engine [[157]]162 provides translation services within the multi-media router 118, quality measurement services, and detection and correction of upstream and downstream failures, each of which is discussed in detail hereinbelow.

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[0064] The translation services performed by the flow quality management engine ~~[[157]]162~~ within the multi-media router 118 comprise the capability to translate a source address, destination address, source port, destination port or any combination of these fields. The multi-media router 118 is also capable of removing and/or inserting a multi-protocol label switching (MPLS) tag in the IP header of the RTP data packet as it traverses the rerouting system 100. In addition, the multi-media router 118 is capable of inserting or modifying a diffserv codepoint located within the IP header of the RTP data packet, which, as is known in the art, is used to modify priority of the data packets.

[0065] The quality measurement services provided by the flow quality management engine ~~[[157]]162~~, within the multi-media router 118, are provided on a per flow basis, wherein an RTP flow is defined by a source IP address, a destination IP address, a source port, and a destination port. Quality measurement preferably comprises maintaining current statistics for the RTP data flow within the network processor memory, as well as aggregate and min/max statistics for the RTP data flow where applicable. Examples of statistics that may be collected include latency, jitter and packet loss for a pre-defined window of time. It should be noted that the window can be identified via the session router or the multi-media router 118.

Paragraph [0067]:

[0067] As mentioned hereinabove, the flow quality management engine ~~[[157]]162~~, within the multi-media router 118, also provides the detection and correction of upstream and

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downstream failures in the transmission of RTP data packets. One method used by the flow quality management engine ~~[[157]]~~162 is detecting RTP data flow interruption. FIG. 4 is a block diagram that provides an example of a communication network for purposes of illustrating flow interruption detection.

Paragraph [0072]:

[0072] Specifically, RTP data packets flow from the RTP data source 202 to the first multimedia router 212, to the second multi-media router 214, to the destination 222, and ~~[[visa]]~~vice-versa. The first multi-media router 212 re-transmits packets from the RTP data source 202 to the second multi-media router 214, and the second multi-media router 214 re-transmits RTP data packets from destination 222 to the first multi-media router 212. Note that in FIG. 4 the three RTP data flows are represented by arrows (wherein the reverse flows are not shown, but are implied). Also note that the second multi-media router 214 performs the flow interruption detection using the flow guard timers mentioned hereinabove. If all three flows are interrupted at the same time, there is a very good chance that first multi-media router 212, or a shared link between the first and second multi-media routers 212, 214, is no longer working. Thus, the second multi-media router 214 may make a decision as to where to send the RTP data packets going in the reverse direction. The second multi-media router 214 can alternatively forward packets to the third multi-media router 216 for forwarding to the RTP data source 202.